REMARKS

Claims 1-4 are all the claims pending in the application.

In the Final Office Action, the Examiner maintained his previous rejection based upon the combination of Asakawa and Onishi. Applicant amends claims 1 - 4 and submits that the references, alone or in combination, do not suggest the invention as claimed.

It is again emphasized that the invention relates to a multiple column system in which there is non-interplaying or non-interfering selectivity based on the different types of interactions employed. Simply stated, each analysis system of the invention uses a separation mode different from that used in the other system, to eliminate influence of one system's operation upon the other. This is not the case in the cited prior art.

For example, in the construction described in Experiment 5 of Asakawa, the first and second columns are different from each other; however, the separation mode used in the second column is of the same kind as the separation mode used in the first column. In other words, in the construction described in Experiment 5 of Asakawa, when a large amount of organic solvent is contained in the mobile phase component of the reversed phase separation (first column), the optical resolution separation (second column) is also influenced (i.e., mutual interference occurs). Thus, the results are interdependent rather than independent. This is exactly what the invention avoids.

In contrast, it has been shown by an embodiment of the invention that, according to the gradient elution technique of the present invention, it is possible for a large amount of organic solvent (which is acetonitrile in the embodiment) to be contained. The construction described in

Experiment 5 does not correspond to the construction of the present invention, in which the mode in each analysis system is "different from that of the other analysis system".

Claim 1 has been amended to specify a mechanism for gradient elution, in order to further distance the claimed invention from the cited art.

In the above regard, it is noted that, the term "gradient effect" is used in the description of Experiment 4 of Asakawa. This effect in Asakawa is unintentionally achieved through mixing when the mobile phase diluent is extruded with the mobile phase of the second column; i.e., the gradient is not intentionally realized. In any case, the first and second columns in Experiment 4 are of the same mode, and the construction is different from that of Experiment 5. A gradient effect cannot be obtained with the construction of Experiment 5.

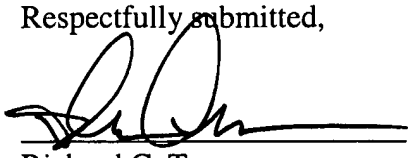
In contrast, in the present invention, adaptation to gradient elution is effected without involving any change in column or mobile phase. The unintended gradient of Experiment 4 does not suggest adding a gradient mechanism to a liquid chromatography system effecting separation in different modes.

Accordingly, the invention could not have been achieved from the teachings of Asakawa and Onishi.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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